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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Patrick Boschet

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04/28/2009

YOUNG & THOMPSON

209 Madison Street

Suite 500

ALEXANDRIA, VA 22314

EXAMINER

WOLLSCHLAGER, JEFFREY MICHAEL

ART UNIT

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1791

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,446	Applicant(s) BOSCHET ET AL.	
	Examiner JEFFREY WOLLSCHLAGER	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8,9,13-17 and 21-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8, 9, 13-17, and 21-33 is/are rejected.
- 7) ☒ Claim(s) 8 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1791

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 20, 2009 has been entered.

Response to Amendment

Applicant's amendment to the claims filed February 20, 2009 has been entered. Claims 8, 13, 14, 16, 21, 22 and 26 are currently amended. Claims 32 and 33 are new. Claims 1-7, 10-12, and 18-20 have been canceled. Claims 8, 9, 13-17 and 21-33 are pending and under examination. Applicant's amendment has overcome the previous rejection under 35 USC 112, second paragraph.

Claim Objections

Claims 8 and 16 are objected to because of the following informalities: the claims recite the stripping composition is "a solvent-free". The recitation should be - - solvent-free- - . Further, line 17 of claim 16 recites "and said one vinyl ether". The recitation would be more properly rendered - - and said at least one vinyl ether - -. Appropriate correction is required.

Art Unit: 1791

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8, 9, 15-17, and 23-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 8 and 16, recite that the anti-stick agent comprises at least one vinyl ether compound at a concentration of 8 to 12 parts by weight in the stripping composition. The examiner submits there is insufficient support for such a limitation in the original disclosure. The examiner submits there is not support in the original disclosure for a claim limitation that employs only 1 vinyl ether compound at a specified concentration of 8 to 12 parts by weight. The examiner submits that the specific limitation of 8 to 12 parts by weight is only disclosed in combination with two specific vinyl ethers; namely, dodecyl monovinyl ether and cyclohexane dimethanol divinyl ether. Further, the examiner submits that the broad disclosure of less than 40 parts by weight of vinyl ether is not sufficient to demonstrate support for and possession of a narrow range of 8 to 12 parts by weight. Similarly, claim 32 recites that the anti-stick agent comprises two vinyl ethers at a concentration of 8 to 12 parts by weight in the stripping composition, but does not recite the specific vinyl ethers employed. This rejection may be overcome by providing the page and line number(s) in the specification where support for the limitations may be found. Alternatively, the rejection may be overcome by amending the claims in accord with the original disclosure. Claims 9, 15, 17 and 23-31 are rejected as dependent claims.

Art Unit: 1791

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 15 recites the wipe or cloth is impregnated in a stripping composition "presenting the characteristics of claim 8". The limiting effect of the recitation is unclear. It is unclear whether "presenting the characteristics of claim 8" positively requires the stripping composition of claim 8 or not. For the purposes of examination, the claim is understood to require the stripping composition set forth in claim 8. The claim should be amended to make the intended scope of the claim clear. Claim 23 recites "a thickness of micrometer order". The limiting effect of the recitation is unclear. It is unclear what range of thicknesses is reasonably within the "order" of micrometer. For the purposes of examination, any thickness generally suited for coating a mold is understood to be within the claimed range.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

Art Unit: 1791

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8, 9, 13-17, 21-25, 29, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckberg et al. (US 5,650,453) in view of Braley (US 2,811,408).

Regarding claims 8, 9, 16, 17, and 32, Eckberg et al. teach a solvent-free UV curable epoxy silicone based liquid release composition (Abstract) comprising epoxy polydimethylsiloxane (col. 4, lines 12-18), an effective amount diaryliodinium salt as a catalyst (col. 5, lines 13-17; col. 8, lines 5-7), and vinyl ethers, including mixtures of vinyl ethers (col. 3, lines 19-26; col. 6, lines 38-62). The composition of Eckberg et al. comprises in one embodiment about 80 to 90 weight percent of the epoxy silicone, preferably 5 to 20 weight percent of the vinyl ethers, and an effective amount of catalyst, such as 0.5 to 3 parts of the catalyst (col. 6, line 63- col. 7, line 6). The claimed amounts of each component in the composition equate to a weight percent range of 83.3 - 92.5 weight percent epoxy polydimethylsiloxane, 0.4 - 7.6 weight percent diaryliodinium salt and about 7 - 9.1 weight percent of the vinyl ether. As such, Eckberg et al. disclose a substantially overlapping range with the claimed values. Further, Eckberg et al. teach the release composition may be applied to metal (col. 7, lines 31-33). Eckberg et al. do not teach applying the release composition to a metal mold. However, Braley teaches that it is known in the art to apply methylpolysiloxanes as release agents on metal molds (col. 1, lines 17-28).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the teaching of Eckberg et al. and Braley and to have employed the release composition of Eckberg et al. as a mold release coating on a

Art Unit: 1791

mold, as suggested by Braley, since Braley teaches that methylpolysiloxanes are known to be well suited for use as release agents in metal molds.

As to claims 13, 14, 21, 22, and 33, the composition of Eckberg et al. comprises in one embodiment about 80 to 90 weight percent, but as low as about 51 weight percent, of the epoxy silicone, preferably 5 to 20 weight percent of the vinyl ethers, but up to 49 weight percent, and in one embodiment about 0.5 to 3 parts of the catalyst (col. 6, line 63- col. 7, line 6). Further, Eckberg et al. teach employing an effective amount of catalyst (col. 3, lines 28-30; claim 1). As such, Eckberg et al. disclose a substantially overlapping range with the claimed values and suggest optimizing the levels of catalyst, as required, to achieve an effectively cured composition.

As to claim 15, 24, and 29, Braley teaches rubbing the mold surface with a swab/wipe saturated with the release composition (col. 2, lines 52-56). It would have been obvious to one having ordinary skill at the time of the claimed invention to have applied the composition of Eckberg et al. with the swabbing method set forth by Braley for the purpose of effectively applying a release composition to the surface of the mold in an art recognized manner.

As to claim 23, Eckberg et al. disclose 0.5 mil coatings (co., 13, line 52).

As to claim 25, Eckberg et al. disclose utilizing UV radiation (col. 7, line 42-49)

Claims 26-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckberg et al. (US 5,650,453) in view of Braley (US 2,811,408), as applied to claims 8, 9, 13-17, 21-25, 29, 32 and 33 above, and further in view of Eckberg (US 4,256,870) and Lopes et al. (US 4,681,714).

As to claims 26-28 and 30, the combination teaches the method set forth above. Eckberg et al. '453 do not teach utilizing heat to polymerize the composition. However, Eckberg

Art Unit: 1791

'870 (col. 4, lines 56-58; Table 1) and Lopes (Example 1; Table 1) disclose methods wherein silicone release compositions are polymerized with heat. Further, Eckberg '870 teaches a heat curing reaction can be initiated with radiation.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Eckberg et al. '453 and to have polymerized the composition with heat, as suggested Eckberg '870 and Lopes, since each of Eckberg '870 and Lopes, suggest heat it is an art recognized alternative method for curing silicone release compositions.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eckberg et al. (US 5,650,453) in view of Braley (US 2,811,408), as applied to claims 8, 9, 13-17, 21-25, 29, 32 and 33 above, and further in view of Dmitroff (US 3,321,019).

As to claim 31, the combination teaches the method set forth above. Eckberg et al. do not teach molding a helicopter blade. However, Dmitroff teaches molding a composite fiberglass helicopter blade in a mold (col. 1).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the teaching set forth in the combination and to have molded a helicopter blade, as suggested by Dmitroff, since Dmitroff suggests helicopter blades can be produced in molds. One having ordinary skill would have found it obvious to have molded a wide variety of articles, including a helicopter blade, in order to realize the release advantages associated with the composition of Eckberg et al.

Art Unit: 1791

Response to Arguments

Applicant's arguments filed February 20, 2009 have been fully considered, but they are moot in view of the new grounds of rejection necessitated by the amendment to the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY WOLLSCHLAGER whose telephone number is (571)272-8937. The examiner can normally be reached on Monday - Thursday 6:45 - 4:15, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Wollschlager/
Examiner, Art Unit 1791

April 28, 2009

Application/Control Number: 10/533,446

Page 9

Art Unit: 1791